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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SUGHRUE MION ZINN
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EXAMINER

VIDA, MELANIE M

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 05/06/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,416

Applicant(s)

KUWATA ET AL.

Examiner

Melanie M Vida

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

JEROME GRANT II
PRIMARY EXAMINE

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement(s) (IDS) submitted on 7/17/00 has been considered by the examiner and is attached to this office action.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: The Examiner has thoroughly reviewed the application. It appears step (S305) in **figure 5** is missing in the specification. **Figure 6** shows the steps (S405), and (S435), which are missing in the specification, (page 20, lines 25-26; pg. 20, lines 22 through pg. 21, lines 24).

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings, specifically, **figure 6**, are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "S325" (in the specification) and "S425" (in the drawing) have both been used to designate "GONE BEYOND RIGHT-HAND END?" (pg. 21,

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line 4). Additionally, in figure 13, the buttons labeled 34a, 34b, and 34c, are not described in the specification, (pg. 34, lines 1-2).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: The Examiner has thoroughly reviewed the application. It appears steps **S200**, **S210**, **S220**, and **S230**; in **figure 7** are missing in the description, (pg. 21, lines 25-27).

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to because the specification denotes the CONTRAST scale from WEAK to STRONG on the slider scale. However, **figure 12**, denotes the CONTRAST scale from LOW to HIGH, respectively, (pg. 32, line 1).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 3-6** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the image processing function" in line 2.

Claim 4 recites the limitation "the recorded image modifying instruction" in line 4.

There is insufficient antecedent basis for this limitation in the claim(s).

9. **Claims 4-6** are rejected under 35 USC 2nd paragraph for depending on the rejected claims 3-4.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1-18** are rejected under 35 U.S.C. 102(b) as being anticipated by Zelten, US-

PAT-NO: 5,652,663, (hereinafter, Zelten).

Regarding, **claim 1**, Zelten inherently teaches, "a ^{photographic} medium on which an image modifying program is recorded for carrying out image processing on a computer", as evidenced by figure 1, and that once an image is displayed on a computer monitor (16), the user can perform sharpening and color correction changes in the image, (col. 1, lines 60-65). Additionally, Zeltan teaches the

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basis of a scanned image data, for example 512 x 512 pixel image, which reads on “on the basis of image data in which an image is composed of dot-matrix pixels”, (col. 5, lines 57-59; col. 3, lines 48-53). Furthermore, Zeltan teaches a scanner calibration step (10) for setting the minimum exposure (12), for a preview scan (14), which reads on “a modifying parameter computing function” based on the background color and light intensity of the image to provide medium quality image on the display (16), which reads on “of performing a predetermined computing process using image data of each pixel to obtain a modifying parameter for changing a picture quality on the basis of predetermined image processing”, (col. 3, lines 35-55; col. 5, lines 58-65). A color palette or a sliding scroll bar, which reads on “a modifying parameter correcting function” are adjusted by a user to perform individual color density changes, tone scale adjustments, as well as inter-color hue and color saturation adjustments, which reads on “of obtaining an image modifying instruction by an operator to correct the modifying parameter on the basis of the image modifying instruction”, (col. 3, lines 66 through col. 4, lines 11). Finally, Zeltan teaches of an output correction (28), which reads on “an image data correcting function” that image enhancements are applied from the low resolution scan to process the new high resolution, final display image (30) based on the user adjustable parameters, which reads on “of performing the predetermined image processing for the image data on the basis of the modifying parameter”, (col. 4, lines 27-32).

Regarding, **claim 2**, Zeltan teaches of a resolution control by cutting an image resolution in half, which reads on “the modifying parameter computing function” by advancing the subject a greater distance between successive line scans and by advancing a charge in the CCD at a higher rate proportional to the increase in scanning speed by skipping cells of the CCD registers

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contained in the CCD (40), which reads on "collects by sampling the image data of each pixel according to a predetermined criterion to perform computation on the basis of results of collection, thereby determining the modifying parameter", (col. 4, lines 52-62; col. 6, lines 45-47).

Regarding, **claim 3**, as best understood by the claim language, Zeltan teaches that after the parameters are changes (i.e. the new parameters) the scanner and the enhancement DSP (i.e. digital signal processor) (66) retrieves a fresh copy of the raw data stored in the preview buffer (62) and applies the new set of parameters to form a new, enhanced image, which reads on "the modifying parameter correcting function and the image processing function are repeated on the basis which has gone through the image processing", (col. 5, lines 58-65; col. 6, lines 37-43).

Regarding, **claim 4**, as best understood from the claim language, Zeltan teaches that the user may choose "Color" from the "Edit" menu and change the saturation for all three colors, or may change individual color saturation, which reads on "wherein the modifying parameter correcting function record the image modifying instruction by the operator to reproduce the image data at any stage using the recorded image modifying instruction", (col. 6, lines 28-36).

Regarding, **claim 5**, as best understood from the claim language, Zeltan teaches of an adaptive sharpening based on user selectable/adjustable parameters, which reads on "the modifying parameter correcting function obtains a fine adjustment parameter for changing the modifying parameter by fine adjustment to correct the modifying parameter on the basis of the obtained fine adjustment", (col. 5, lines 54-57).

Regarding, **claim 6**, as best understood from the claim language, Zeltan teaches of preset parameters that are downloaded from a host computer (70) upon power-up of the scanner and

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adjustable by the user thereafter to acquire a different image, which reads on “the modifying parameter correcting function changes the operation processing in the modifying parameter computing function to thereby change the modifying parameter to be obtained”, (col. 5, lines 57-65).

Regarding, **claim 7**, Zeltan, as shown in figure 2, an apparatus for implementing the method as shown in figure 1, which reads on “an image modifying apparatus which carries out image processing”, (col. 3, lines 5-7; col. 4, lines 32-34). Additionally, Zeltan teaches the basis of a scanned image data, for example 512 x 512 pixel image, which reads on “on the basis of image data in which an image is composed of dot-matrix pixels”, (col. 5, lines 57-59; col. 3, lines 48-53). A primary DSP (58), which reads on “a modifying parameter computing unit” receives it parameters during self-calibration of the scanner for correcting non-uniformities in the CCD, illumination variations across the field, fine tuning of color balance as well as adjustment of resolution, which reads on “which performs a predetermined computing process using image data of each pixel to obtain a modifying parameter for changing a picture quality on the basis of predetermined image processing”, (col. 5, lines 36-44; and col. 5, lines 58-65). A computer display with menus driven command set, which reads on “a modifying parameter correcting unit”, allows the user to manipulate parameters applied by the enhancement DSP (66), which reads on “which obtains an image modifying instruction by an operator to correct the modifying parameter on the basis of the image modifying instruction”, (col. 6, lines 28-35). An enhancement DSP (66) which reads on “an image data correcting unit” receives user selectable/adjustable parameters from a user via a host computer (77), fetches the raw image data from a buffer, applies the new set of parameters, and send a new enhanced image back to the

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computer (70) display, which reads on “which performs the predetermined image processing for the image data on the basis of the modifying parameters”, (col. 5, lines 53-60; col. 6, lines 38-44).

Regarding, **claim 8**, please refer to the corresponding rejection in claim 2.

Regarding, **claim 9**, please refer to the corresponding rejection in claim 3.

Regarding, **claim 10**, please refer to the corresponding rejection in claim 4.

Regarding, **claim 11**, please refer to the corresponding rejection in claim 5.

Regarding, **claim 12**, please refer to the corresponding rejection in claim 6.

Regarding, **claim 13**, Zeltan, as shown in figure 1, teaches a flowchart of a decision making process of the invention for computer enhanced imaging, which reads on “a method of image modification”, (col. 1, lines 1-2; col. 3, lines 4-5; col. 3, lines 17-19). Additionally, Zeltan teaches the basis of a scanned image data, for example 512 x 512 pixel image, which reads on “on the basis of image data in which an image is composed of dot-matrix pixels, thereby performing image modification”, (col. 5, lines 57-59; col. 3, lines 48-53). Furthermore, Zeltan teaches a scanner calibration step (10) for setting the minimum exposure (12), for a preview scan (14), which reads on “performing a predetermined computing process” based on the background color and light intensity of the image to provide medium quality image on the display (16), which reads on “using image data of each pixel to obtain a modifying parameter for changing a picture quality on the basis of predetermined image processing”, (col. 3, lines 35-55; col. 5, lines 58-65). A color palette or a sliding scroll bar, which reads on “obtaining an image modifying instruction” are adjusted by a user to perform individual color density changes, tone scale adjustments, as well as inter-color hue and color saturation adjustments, which reads on “by an

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operator to correct the modifying parameter on the basis of the image modifying instruction,” (col. 3, lines 66 through col. 4, lines 11). Finally, Zelten teaches of an output correction (28) for implementing image enhancements on the low resolution scan on the basis of the user-adjustable parameters, which reads on “performing the predetermined image processing for the image data on the basis of the modifying parameter”, (col. 4, lines 27-32).

Regarding, **claim 14**, please refer to the corresponding rejection in claim 2.

Regarding, **claim 15**, please refer to the corresponding rejection in claim 3.

Regarding, **claim 16**, please refer to the corresponding rejection in claim 4.

Regarding, **claim 17**, please refer to the corresponding rejection in claim 5.

Regarding, **claim 18**, please refer to the corresponding rejection in claim 6.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie M Vida whose telephone number is (703) 306-4220. The examiner can normally be reached on 8:30 am 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melanie M Vida
Examiner
Art Unit 2626

MMV

mmv


JEROME GRANT II
PRIMARY EXAMINER

April 22, 2004